

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:	Antti Kokkinen, et al.	Examiner:	Ben C. Wang
Serial No.:	10/688,640	Group Art Unit:	2192
Filed:	October 17, 2003	Docket No.:	200701903-2
Title:	UPDATE SYSTEM EMPLOYING REFERENCE SOFTWARE TO REDUCE NUMBER OF UPDATE PACKAGES		

PROPOSED EXAMINER AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Please find enclosed the proposed Examiner's amendment to place this application in condition for allowance.

Respectfully submitted,

/Philip S. Lyren #40,709/

Philip S. Lyren
Reg. No. 40,709
Ph: 832-236-5529

Application No. 10/688,640
Proposed Examiner Amendment:

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims:

1. (Currently Amended) A method executed by a central processing unit for updating software in an electronic device, the method comprising:
generating an update package for updating at least one software application, the update package being generated based upon difference information between the at least one software application and at least one reference software installed on the electronic device;
updating the at least one software application using the update package and the at least one reference software; [[and]]
wherein the updating leaves the at least one reference software unchanged and the at least one reference software includes files common to a plurality of versions of the software application; and
wherein the files common to a plurality of versions of the software application includes at least one of binaries, firmware code, dynamic link libraries (DLLs), and JAVA archives (JAR files) with at least one software application.
2. (Canceled).
3. (Previously Presented) The method according to claim 1, wherein the update package is performed based on the reference software installed on the electronic device instead of the software package such that only one update package is disseminated to update multiple different versions of the software application.
4. (Original) The method according to claim 1, further comprising updating multiple update versions of the at least one software application installed on the electronic device is performed using a single update package.

Application No. 10/688,640
Proposed Examiner Amendment:

5. (Original) The method according to claim 1, further comprising installing the at least one software application and the at least one reference software as part of a single installation.
6. (Original) The method according to claim 1, further comprising updating the at least one reference software and updating the at least one software application as part of a single update.
7. (Original) The method according to claim 1, wherein the at least one software application comprises a plurality of software applications, and the at least one reference software comprises a plurality of reference software.
8. (Original) The method according to claim 7, further comprising:
 - identifying a software application needing updating from the plurality of software applications installed on the electronic device; and
 - identifying whether a reference software corresponding to the software application needing updating is present on the electronic device, wherein if the reference software is not present, then installing the software application and an associated reference software in a single update on the electronic device.
9. (Original) The method according to claim 7, further comprising:
 - identifying a software application needing updating from the plurality of software applications installed on the electronic device; and
 - identifying whether a reference software corresponding to the software application needing updating is present on the electronic device, wherein if the reference software is present, then retrieving an update package for the software application needing updating;
 - verifying the update package; and
 - installing the update package on the electronic device.

Application No. 10/688,640
Proposed Examiner Amendment:

10. (Original) The method according to claim 7, further comprising:
identifying a software application needing updating from the plurality of software applications installed on the electronic device;
determining if the update is needed immediately; and
storing the update until the update is needed immediately.
11. (Original) The method according to claim 10, wherein when the update is determined to be needed immediately, then
invoking an update agent to employ at least the stored update package and reference software; and
updating the software application with the update package.
12. (Currently Amended) A system for updating software, the system comprising:
an electronic device capable of having software installed thereon;
a software delivery device for receiving and installing a reference software to the electronic device if the electronic device does not have the reference software previously installed; [[and]]
the software delivery device receiving and delivering at least one update package to the electronic device, wherein the at least one update package is based on differences between at least one application software and the reference software, and the reference software facilitates, using the at least one update package, at least one update to the application software installed on the electronic device, and wherein the updating leaves the reference software unchanged, and the reference software includes a plurality of shared files with the application software; and
wherein the plurality of shared files include at least one of binaries, firmware code, dynamic link libraries (DLLs), and JAVA archives (JAR files) with at least one software application.
13. (Canceled)

Application No. 10/688,640
Proposed Examiner Amendment:

14. (Original) The system according to claim 12, further comprising an update generating system, the update generating system comprising a loader manager, the loader manager:

- managing loading of application software and application software version updates from the software delivery device;
- employing a loader from a loader module; and
- employing security services to authenticate software being delivered.

15. (Canceled).

16. (Original) The system according to claim 14, wherein the loader manager is adapted to:

- identify an application software needing updating;
- identify whether reference software associated with the application software needing updating exists; and
- coordinating an update of the application software and an associated reference software in a single update.

17. (Original) The system according to claim 14, wherein the loader manager is adapted to:

- retrieve the update package;
- access contents of the update package; and
- verify the update package.

18. (Original) The system according to claim 14, wherein the loader manager is adapted to determine immediacy of a needed update for a particular application software.

Application No. 10/688,640
Proposed Examiner Amendment:

19. (Currently Amended) The system according to claim 12, wherein the software delivery device is one of a server, a Compact Disk Read-only memory (CDROM), and a network.

20. (Original) The system according to claim 12, wherein the electronic device is one of a computer, a digital phone, and a digital camera.

21. (Canceled)

22. (Currently Amended) A method executed by a central processing unit for updating software in an electronic device, the method comprising:

generating a first update package for updating at least one software application, the first update package being generated based upon difference information between a first software version and a reference software corresponding to the at least one software application;

generating a second update package for updating the at least one software application, the second update package being generated based upon difference information between a second software version and the reference software corresponding to the at least one software application;

generating a third update package for updating the at least one software application, the third update package being generated based upon difference information between the first and second update packages; [[and]]

updating the at least one software application using the third update package, wherein the reference software includes files common to the at least one software application and to the second software version; and

wherein the files common to the at least one software application and to the second software version include at least one of binaries, firmware code, dynamic link libraries (DLLs), and JAVA archives (JAR files) with at least one software application.

23. (Canceled)

Application No. 10/688,640
Proposed Examiner Amendment:

24. (Previously Presented) A system for updating software, the system comprising:

an electronic device capable of having software installed thereon;

a first update package generator for generating update packages based upon difference information between a version of software and a reference software corresponding to at least one software application;

a second update package generator for generating update packages based upon difference information between different update packages; and

a software delivery device for delivering at least one update package generated based upon difference information between different update packages to the electronic device, wherein the reference software includes at least one of a plurality of shared binaries, firmware code, dynamic link libraries (DLLs), and JAVA archives (JAR files) with the at least one software application.